

DELPHI SERIES



FEATURES

- High Efficiency:
91% @ 12Vin, 5V/6A out
- Voltage and resistor-based trim
- No minimum load required
- Output voltage programmable from 0.9Vdc to 5.0Vdc via external resistors
- Fixed frequency operation
- Input UVLO, output OCP, SCP
- Remote ON/OFF (Positive)
- ISO 9001, TL 9000, ISO 14001, QS9000, OHSAS 18001 certified manufacturing facility
- UL/cUL 60950 (US & Canada) Recognized, and TUV (EN60950) Certified

Delphi NC Series Non-Isolated Point of Load DC/DC Power Modules: 12Vin, 0.9V-5.0Vout, 6A

The Delphi NC Series, 12V input, single output, non-isolated point of load DC/DC converters are the latest offering from a world leader in power systems technology and manufacturing -- Delta Electronics, Inc. This product family provides up to 6A of power in a vertical or horizontal mounted through-hole package. The NC12S0A0X06 presented in this datasheet will provide up to 6A of output current and the output can be resistor- or voltage-trimmed from 0.9Vdc to 5.0Vdc. It provides a very cost effective point of load solution. With creative design technology and optimization of component placement, these converters possess outstanding electrical and thermal performance, as well as extremely high reliability under highly stressful operating conditions.

OPTION

- Vertical or horizontal versions

APPLICATIONS

- DataCom
- Distributed power architectures
- Servers and workstations
- LAN/WAN applications
- Data processing applications



SPECIFICATIONS

GENERAL SPECIFICATIONS			OUTPUT SPECIFICATIONS		
Input Voltage		10.2V~13.8V	Output Voltages	programmable	0.9V~5.0V
Switching Frequency	Typical	300KHz	Voltage Accuracy	Typical	$\pm 3\%$ of Vo
Operating Temperature	Typical	-40°C ~ +80°C	Output Current	Maximum	6A
MTBF		7.6M hours	Ripple & Noise	0.9V~2.5V	40 mVp-p
Size (Vertical Version)	(1.20" x 0.61" x 0.46")	30.5x15.5x11.7mm		3.3V~5.0V	50 mVp-p
Size (Horizontal Version)	(1.20" x 0.61" x 0.48")	30.5x15.5x12.3mm	Weight		7.1g

PART NUMBERING SYSTEM

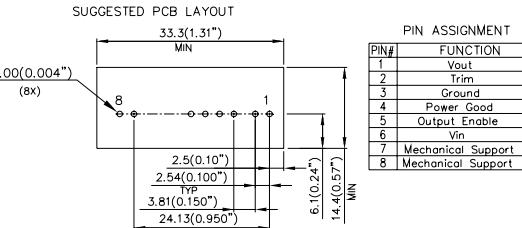
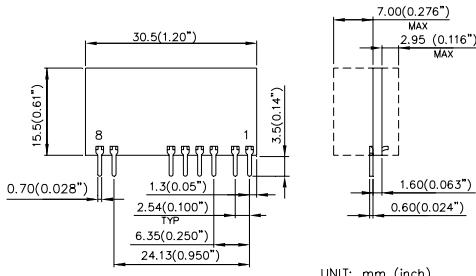
NC	12	S	0A0	H	06	P	N	F	A
Product Series	Input Voltage	Number of outputs	Output Voltage	Mounting	Output Current	ON/OFF Logic	Pin Length		Option Code
NC- Non-isolated Converter	12- 10.2~13.8V	S- Single output	0A0- programmable	H- Horizontal V- Vertical	06- 6A	P- Positive	N-0.14" R-0.118"	F- RoHS 6/6 (Lead Free)	A- Standard Functions

MODEL LIST

Model Name	Packaging	Input Voltage	Output Voltage	Output Current	Efficiency 12Vin @ 100% load
NC12S0A0V06PNFA	Vertical	10.2~13.8Vdc	0.9 V~5.0Vdc	6A	91% (5.0V)
NC12S0A0H06PNFA	Horizontal	10.2~13.8Vdc	0.9 V~5.0Vdc	6A	91% (5.0V)

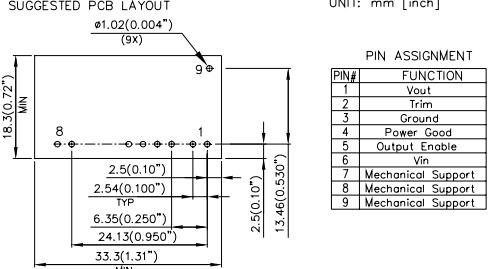
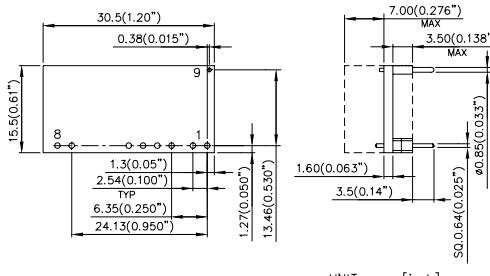
MECHANICAL DRAWING

VERTICAL



NOTES:
DIMENSIONS ARE IN MILLIMETERS AND (INCHES)
TOLERANCE: X.X mm ± 0.5 mm (X.XXX in. ± 0.02 in.)
X.XX mm ± 0.25 mm (X.XXX in. ± 0.010 in.)

HORIZONTAL



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WARRANTY

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